Vienna Instruments
Bass trumpet

Contents

Introduction

Welcome to the Vienna Symphonic Library, and thank you for purchasing one of our Solo Download Instruments! This document contains the mapping information for the Vienna Instruments Bass trumpet. You will find in it a comprehensive survey of the articulations/Patches content, a listing of abbreviations, and the mapping list proper which gives details for every Patch, Matrix, and Preset.

Patch information

The Patch information includes articulation type, playing range, number of samples used, RAM requirements, the number of velocity layers and alternations, AB switching possibilities, etc., as well as Patch specific information if necessary.

All download instruments are built up similarly, so that it is easy to exchange instruments with each other to check out different sounds and combinations. The articulations are largely the same within every Instrument group; here's a brief summary of articulations most instruments offer:

Short notes: Staccato, portato or détaché
Long notes: Sustained with and without vibrato
Dynamics: Fortepiano, sforzato, pfp (2 durations) or crescendo and diminuendo (2 durations)
Flutter tonguing: Normal and dynamics (crescendo and diminuendo, or crescendo only)
Clusters: (Woodwind ensembles only) 3-note clusters, sustained and sforzato
Trills: Half and whole tone trills
Interval performances: Legato, legato with sustain crossfading, fast legato
Repetition performances: Legato, portato or détaché, staccato
Fast repetitions: 16ths at 150, 170, and 190 BPM

The velocity layer switches generally are the same for patches with the same number of layers but may occasionally be adapted to the instrument's requirements. The Patch information also lists the velocity layers in detail.

Interval performances

Interval performances are one of the outstanding features of our Vienna Instruments. They allow you to play authentic legato without any programming tricks. In our Silent Stage, all intervals from minor second to the octave were recorded for every instrument – up and down, of course; that makes 24 interval samples per note for one velocity alone! When you load an interval performance Patch and play a line on your keyboard, the software automatically joins the right samples with their interval transitions again, and you hear a perfect legato. By the way, this technique is not only used for legato but also for other articulations like the strings' portamento, marcato, or détaché and spiccato articulations.

Interval performances also contain at least two legato repetitions for every note which alternate automatically whenever you strike a key more than once. There also are preconfigured thresholds for legato and repetition notes: The legato threshold – i.e., the maximum break between notes where legato is played – is 50 ms. Otherwise, a sustained starting note will sound so that you can easily start a new phrase without leaving the legato Patch. For note repetitions, the threshold is 200 ms: a break up to that duration will yield a legato repetition; if the break is longer, a new starting note. But naturally, it's mingling legato with other articulations which makes a piece really come alive.

Due to their nature, all interval performances are monophonic; otherwise, the software would have to be able to decide which source note belongs to which target note. To circumvent this, you can open two VI instances of the same instrument on separate MIDI tracks without any additional strain on your RAM.

Another variety of interval performance you will come across is the "perf-leg_sus" Patch. These Patches also contain normal legatos, only the target note of each interval is crossfaded into a looped sustain. They can be used for slower pieces with long notes; however, you should use them with circumspection, since plain legatos sound more lively because they not only render the interval transitions as they were played, but also have different target samples for every interval instead of the same sustained note: When you play, e.g., c–e and then c#–e with normal legato, you will get two different "e" tones; with sus-legato you won't.

Matrix information

Each Matrix listing contains information regarding the Patches used for the Matrix, the number of horizontal and vertical dimensions, and switching properties. A mapping table shows the Cell positions for each of the Matrix' Patches.

In order to facilitate working with **MIDI controller switches** like the Modulation wheel, the switching positions are not distributed equally across the controller range if they control more than two Matrix rows or columns; generally, the switching range will be narrower at the extreme positions because they are easy to set, and wider in the middle where it is harder to find the desired setting.

Preset information

The Preset information lists the Matrices used in the Preset as well as its keyswitches. All other information can be gathered from the Matrix and Patch listings, so there's not really much to say here. Please note that the Matrices of a Preset can also be switched with MIDI Program Changes 101–112 instead of keyboard notes, and if you like to keep your keyboard free for playing instead of switching, you can disable Preset keyswitching and only use MIDI Program Changes.

Pitch

For designating pitch, the Vienna Symphonic Library uses International Pitch Notation (IPN), which was agreed upon internationally under the auspices of the Acoustical Society of America. In this system the international standard of A=440 Hz is called A4 and middle C is C4. All pitches are written as capital letters, their respective octave being indicated by a number next to it. The lowest C on the piano is C1 (the A below that is A0), etc.

You can tune your Vienna Instruments to other players, or adjust it to tunings of earlier musical periods by setting the Perform page's Master Tune option within a range of 420 to 460 Hz.

06D Bass trumpet   Range: D2–C#5

Patches

Staccato, portato
Sustained with and without vibrato
Fortepiano, sforzato, pfp 6 sec. with and without vibrato.
Flutter tonguing normal and crescendo
Trills half and whole tone
Legato normal, with sustain crossfading, and fast
Performance repetitions legato, portato, staccato
Fast repetitions 150, 170, 190 BPM

01D BTr staccato	**Samples: 198**	**RAM: 12 MB**

Single notes: Staccato
3 velocity layers: 0–55 mp; 56–108 mf; 109–127 f
2 Alternations

02D BTr portato	**Samples: 198**	**RAM: 12 MB**

Single notes: Portato
3 velocity layers: 0–55 p; 56–108 mf; 109–127 f
2 Alternations

03D BTr sustain_Vib	**Samples: 212**	**RAM: 13 MB**

Single notes: Sustained, with vibrato
3 velocity layers: 0–55 p; 56–108 mf; 109–127 f
Release samples

04D BTr sustain_noVib	**Samples: 212**	**RAM: 13 MB**

Single notes: Sustained, without vibrato
3 velocity layers: 0–55 pp; 56–108 mp; 109–127 f
Release samples

05D BTr fp	**Samples: 33**	**RAM: 2 MB**

Dynamics: Fortepiano
1 velocity layer
2 Alternations

06D BTr sfz	**Samples: 33**	**RAM: 2 MB**

Dynamics: Sforzato
1 velocity layer
2 Alternations

07D BTr pfp_Vib_6s	**Range: D#1–C#5**	**Samples: 40**	**RAM: 2 MB**

Dynamics: Crescendo-diminuendo with vibrato, 6 sec.
1 velocity layer

08D BTr pfp_noVib_6s	**Range: D#1–C#5**	**Samples: 40**	**RAM: 2 MB**

Dynamics: Crescendo-diminuendo without vibrato, 6 sec.
1 velocity layer

09D BTr flatter	**Samples: 66**	**RAM: 4 MB**

Single notes: Flutter tonguing
1 velocity layer: 0–127 f
Release samples

10D BTr flatter_cre	**Samples: 33**	**RAM: 2 MB**

Dynamics: Flutter tonguing, crescendo
1 velocity layer

11D BTr trill_1	**Samples: 132**	**RAM: 8 MB**

Trills: Half tone
2 velocity layers: 0–88 p; 89–127 f
Release samples

12D BTr trill_2	**Samples: 126**	**RAM: 7 MB**

Trills: Whole tone
2 velocity layers: 0–88 p; 89–127 f
Release samples

21D BTr legato	**Samples: 714**	**RAM: 44 MB**

Interval performances: Legato
Monophonic
2 velocity layers: 0–88 p; 89–127 f
Release samples

22D BTr legato-sus	**Samples: 827**	**RAM: 51 MB**

Interval performances: Legato, notes crossfading into sustains
Monophonic
2 velocity layers: 0–88 p; 89–127 f
Release samples

23D BTr legato-fast	**Samples: 953**	**RAM: 59 MB**

Interval performances: Legato, fast
Monophonic
2 velocity layers: 0–88 mp; 89–127 f
Release samples

23D BTr perf-rep legato	**Samples: 170**	**RAM: 10 MB**

Repetition performances: Legato
2 velocity layers: 0–88 p; 89–127 f

24D BTr perf-rep portato	**Samples: 306**	**RAM: 19 MB**

Repetition performances: Portato
2 velocity layers: 0–88 p; 89–127 f

25D BTr perf-rep staccato	**Samples: 306**	**RAM: 19 MB**

Repetition performances: Staccato
2 velocity layers: 0–88 p; 89–127 f

26D BTr fast-rep BPM-150   Samples: 132   RAM: 8 MB

Fast repetitions: 9 repetitions, 16ths at 150 BPM
2 velocity layers: 0–88 p; 89–127 f
Release samples

27D BTr fast-rep BPM-170   Samples: 132   RAM: 8 MB

Fast repetitions: 9 repetitions, 16ths at 170 BPM
2 velocity layers: 0–88 p; 89–127 f
Release samples

28D BTr fast-rep BPM-190   Samples: 132   RAM: 8 MB

Fast repetitions: 9 repetitions, 16ths at 190 BPM
2 velocity layers: 0–88 p; 89–127 f
Release samples

Matrices

Bass trumpet - all   Samples: 3134   RAM: 195 MB

A matrix consisting of all the instrument's patches as well as a combination of sustained notes with staccato attack

Matrix switches: Horizontal: Keyswitches, C6–G6   Vertical: Modwheel, 3 zones

	C6	C#6	D6	D#6	E6	F6	F#6	G6
V1	staccato	sustained vibrato	sforzato	legato	legato repetition	trill half	fast rep. 150 BPM	flutter tonguing
V2	portato	sustained w/o vibrato	fortepiano	legato/sus. XF	portato repetition	trill whole	fast rep. 170 BPM	flutter crescendo
V3	portato	sus/staccato attack	pfp 4 sec.	legato fast	staccato repetition	trill whole	fast rep. 190 BPM	flutter crescendo

Bass trumpet - legato-speed   Samples: 1081   RAM: 67 MB

Legato with sustain crossfading, normal, and fast
Monophonic, Speed controller

Matrix switches: Horizontal: Speed, 3 zones

	H1	H2	H3
legato	sustain XF	normal	fast

Presets

Bass trumpet   Samples: 3134   RAM: 195 MB

Matrices:
Bass trumpet - all
Bass trumpet - legato-speed
Keyswitches: C7, D7